



Student Projects from CS 110, Spring 2010 The Art & Science of Computer Graphics

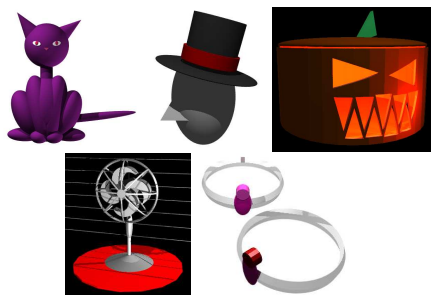
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Computer Science 110

The Computer Science course *The Art & Science of Computer Graphics*, is intended for non-majors. The course studies computer graphics using Duane Bailey's *Mead Modeling System* (<http://www.cs.williams.edu/~bailey/Mead/>). Students develop three-dimensional Mead "models" using the Scheme programming language, which are then processed by Mead and rendered using the POVray ray tracing software. Early models use only pre-defined primitive objects and materials, but students quickly learn to develop custom objects and materials, and later learn the programming skills that allow for replication, randomization, and simple animation in their models.

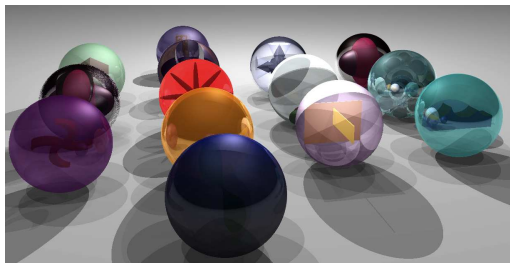
Early Models



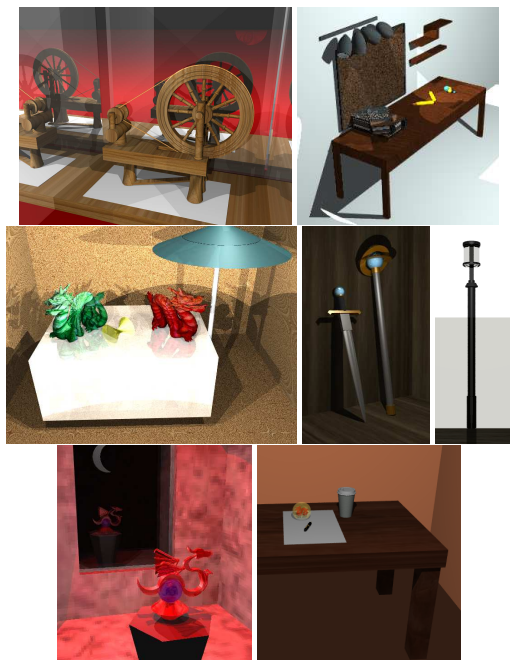
Cat and Fan by Holly Valenzuela, Hat by Emily Travisano, Jack-O-Lantern by Mariam Sabri, Rings by Zehra Nabi.

Marbles

Each student contributed a marble for this collection.

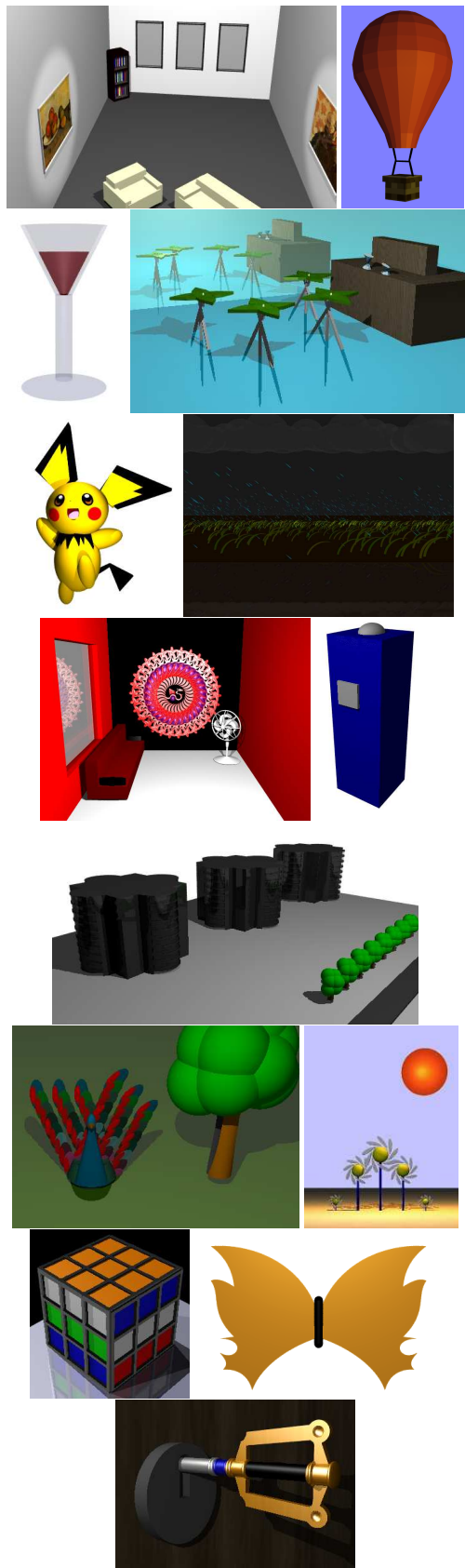


Realistic Models



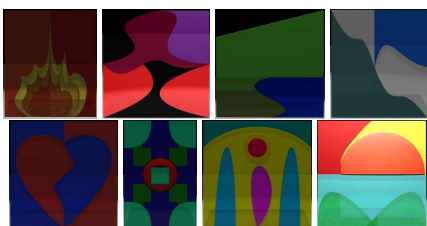
Spinning wheel by Dora Chin, first Desk by Lena Garrettsen, Dragon Table by Ashley Woods, Swords by Emily Travisano, Lamppost by Thinley Wangchuk, Dragon Sculpture by Holly Valenzuela, and second Desk by Sarah Walden.

Later Lab Models



Room scene by Natasha Ansari, Balloon and Rainy Day by Dora Chin, Wine Glass and Key by Emily Travisano, Bar and Peacock by Maggie Georgieva, Pikachu and Red Room by Holly Valenzuela, Tardis by Julia Bloom, Buildings and Flowers/Sun by Lena Garrettsen, Rubik's Cube by Zehra Nabi, and Butterfly by Sarah Walden.

Stained Glass Windows



Final Projects



Holly Valenzuela



Mariam Sabri



Zehra Nabi



Emily Travisano



Dora Chin



Ashley Woods